Cracklin' Static

March 2022 Edition

SIERRA NEVADA Amateur Radio Society

1968 50th Anniversary 2018

Zoom Virtual Meeting Sat March 5, 8 AM

See pg 4….

SNARS NET on DMR – Tuesdays 8pm
DMR Talk Group: 31328 SNARS

SNARS Treasury Closing Balances
Account 2/27/2022

Operating	**$10,562**
Savings	**$10,474**
Self Insurance	**$13,920**
PayPal	**$1,288**
Convention	**$4,212**
Total	**$40,456**
Net Monthly	**$3,372**
Net YTD	**-$6,783**
Memberships Renewals	**22**

SNARS Membership as of 2-27-22

Extra	154	34%
General	125	27%
Technician	156	34%
Advanced	16	3%
No License	8	2%
Total	**459**	

SNARS ARRL Members

Regular	263	57%
Life	42	9%

PRESIDENT'S VOICE

President John Miller, N7JDM

Email: jmil912@gmail.com

Greeting once again, I hope all are well and enjoying the hobby. The weather is teasing us with a change to warmer times but can still throw us a curve-ball. We're still in standby mode for working at any of the repeater sites unfortunately and the recent snowfall has pushed us back a bit further. Warmer weather will arrive, and the work will begin in earnest. We are ready to go to begin installing the new repeater equipment to get the linked system back to full potential.

We are in final negotiations with a facility for a return to our normal breakfast meetings. I hope to have the final agreement inked this week so we can have a sit-down meeting again, as I know many are anticipating. Stay tuned for the latest word.

Our next swap meet will be in the Cabela's parking lot, as before on May 21st'. This time the meet will start at 8 AM to allow those coming from out of the area not to have to roll out at O-dark thirty. The sun should also be peeking over the horizon by that time as well. The Dodges have agreed to offer coffee and donuts again. They did a great job at the last meet so save a couple extra bucks for them.

That's all for now, hear you on the air, 73.

John N7JDM

1968 50th Anniversary 2018

SIERRA NEVADA Amateur Radio Society

PO BOX 7727 Reno NV 89510
Yearly Dues: $40.00 Individual ● $50.00 Family
775.453.4142 http://snars.org

2022 Officers

President.....John Miller N7JDM
Vice-President.....John Byerly, N7ROJ
Treasurer.....Bill Jones, AE7OX
Secretary.....Anthony Marcin, W7XM
Director .....Wes Vick, KG7QXE
Director .....Jim Shepherd, W6US
Director .....Barry Bettman, K6ST

2022 Staff

Cracklin Static .....Howie Holden, WB2AWQ
W7TA Trustee .....Peter DeBay, KE7VSR
KR7ENO Trustee.....Howie Holden, WB2AWQ
Control Operator .....Pat Sheehan, W7DED
Youth Involvement.....Barry Bettman K6ST
NVQSO Coordinator.....Jim Shepherd, W6US
Historian .....Jon Fox, KF7KTC
Tech Team Lead .....Pat Sheehan, W7DED
Membership .....Kim Farnham, KG7TMA
PIO .....Greg Krantz, NT7Q
VE Coordinator.....Krystal Rhoades, AJ6GC
Meeting Greeter .....Bill Jones, AE7OX
Noon Net Manager .....Wes Vick, KG7QXE
DMR Net Manager .....Anthony Marcin, W7XM
Reno Ham Swap .....Wes Vick, KG7QXE
Webmaster .....Erik Andreasen, K6CZH
Club Sales Manager.....Julie Dodge, N7JWL
Recording Secretary.....Doug Edmondo, W7DBE

Cracklin Static Publication

Editor: Howie Holden **WB2AWQ** - holden7471@msn.com
Cracklin' Static is the Newsletter of, and sponsored by the Sierra Nevada Amateur Radio Society. Cracklin' Static is published the week before meetings. Opinions expressed herein are those of the editors and contributors and should not be considered as official expressions of the Club Officers, Staff or Club Members, or as endorsements by same.

Material for publication may be edited to enhance readability or to save space. We reserve the right to use whatever font size, line spacing or other tools as may be required to publish this Newsletter. **Deadline for input to the newsletter is 1500 hours on the Sunday** prior to the 1st Saturday (or whichever Saturday is the meeting) of each month.

SNARS Wide Area Linked System

147.030 + Pl 123.0	Sparks, Fernley, Fallon	
147.210 + PL 100.0	Reno, Sparks	
147.150 + PL 123.0	Lake Tahoe, Truckee, Carson	
146.925 –PL 123.0	Lovelock, Fallon	
146.670 –PL 123.0	Winnemucca	
444.875 + PL 100.0	Yerington	
444.125 + PL 123.0	Reno Sparks	

DMR Systems

444.925 + CC 1	Reno, Sparks	
444.825 + CC 1	Dayton, Fallon, Carson	
443.925 + CC 1	Lake Tahoe, Truckee, Carson	
443.950 + CC 1	Incline Village	
442.875 + CC 1	Sparks, Fernley, Fallon	
442.850 + CC 1	Downtown Reno	
441.950 + CC 1	Fallon, Fernley	

Fusion Systems

146.610 – PL 123.0	Reno, Carson, Dayton	

IRLP / EchoLink Systems

147.300 + PL 123.0	Reno, Sparks	

Packet / APRS

145.050 - RNO	Reno, Carson, Dayton	
145.050 - ROSE	Lake Tahoe, Truckee. Carson	
144.390 - TOULON	Lovelock, Fallon	

Standalone Systems

147.390 + PL 100.0	Reno, Carson, Dayton	
443.075 + PL 123.0	Reno, Carson, Dayton	
927.0875 + PL 114.8	Reno, Carson, Dayton	

Online Offline Not Linked

Noon Net

Sierra Nevada Amateur Radio Society

Weekday on the SNARS Linked System

147.030 + PL 123 – Sparks/Fernley
147.150 + PL123.0 – Lake Tahoe / Truckee
147.210 + PL 100.0 - Reno
444.875 + PL 100.0 - Yerington
146.925 - 123.0 – Lovelock / Fallon
146.67 – PL 123.0 - Winnemucca

Monday through Friday @ 12:00pm

Open to all amateur radio operators. A general informational net for the amateur radio community of Northern Nevada and Eastern California. Radio Checks and Questions are welcomed.

Nets on the SNARS Linked Systems

147.210 + 100.0 | 147.030 + 123.0 | 147.150 + 123.0
147.670 – 123.0 | 146.925 – 123.0 | 444.875 + 100.0

ERC Net for NV and Northern CA	Monday @ 9:15pm
N. Western NV ARES Net	Thursday at 7:30pm
Northern Nevada Preppers Net	Wednesday @ 8:00PM
Hospital Net	Friday @ 10:00AM

Nets on IRLP (GSR) System

Repeater: 147.300 + 123.0

Amateur Radio Newsline	Monday - 8:00PM
Nevada Skywarn Net	Wednesday - 7:00pm

Nets on Simplex/HF

Jefferson Noon Net	7.204 LSB	Daily - 12:00pm
6 Meter Net	50.350 USB	Tuesday – 8:00pm
2 Meter Weak Signal	144.250 USB	Wednesday - 8:00PM
2 Meter Simplex Net	146.500 FM	Thursday – 8:00PM
10 Meter Net	28.350 USB	Sunday – 2:00PM

DMR

DIGITAL MOBILE RADIO

SNARS Weekly DMR Net – Tuesdays 8:00PM

SNARS Talk Group 31328

Open to Members and Guests. A general information net each week on DMR.

SNARS CALENDAR

SNARS Board Meeting Wednesday, Mar 9, 6:00PM. Location and mode Chin Chin, Sparks, and Zoom

QCWA Meeting Sat, March 12, 11am – 1pm Famous Dave's Bar-B-Que, 4925 Kietzke Ln, Reno

Reno QRP Group Meeting Tue, March 15, 2022, 11am – 12pm Jack's Coffee Shop #2, 605 N Wells Ave, Reno, NV Contact Ed, WD7Y WD7Y@sbcglobal.net for more info. If cancellation is needed, will be announced on the SNARS noon net.

HAM RADIO NIGHT on Zoom 7:00 PM , March 21, 2022 see https://snars.org/hamradionight/

Next months SNARS Breakfast Meeting April 2, 8 AM 2022. Location and media mode tentative depending on Board decision and local restrictions.

WELCOME NEW MEMBERS

As of February 26

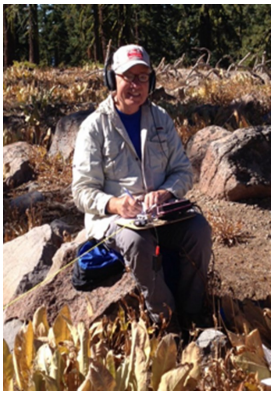
Mark	**Moser**	**KK7DTO**
David	**Paris**	**KK7DTT**
Darryl	**Mansfield**	**KK7DTP**
Cora	**Batchelder**	**KK7DTU**
Richard	**Schwartz**	**K6YVL**
Michael	**Vicari**	**W7NTT**
Brent	**Finster**	**K6BEF**

SNARS Virtual Monthly Meeting

SNARS (virtual on zoom conferencing) Monthly Meeting on

Saturday March 5, 2022 8:00AM PST

PRESENTATION:
Portable stations on the air: POTA (Park on the Air) & SOTA (Summits on the Air) with K1LB Woody



This presentation is on the subject of operating outdoors, at a park or mountain peak. Our speaker is Woody Brown, K1LB; he's lived in Reno since 2001 so some of you may have met him. He's held his ham ticket for six decades and counting. Woody is an avid ham operator in both Parks on the Air as well as Summits on the Air. He plans to show you how to get involved in each of them with a tour of their websites that will enable you to engage "activators" immediately and to plan the steps to successfully activate local parks and peaks. Armed with these details you may get the bug, as he did, to experience newfound enjoyment in your amateur radio hobby!

TO REGISTER, go to:
https://us06web.zoom.us/meeting/register/tZwkfuGqqT4sGtJNpy9kU_QOfNERdXDmFdjv

Any questions, email Barry k6st@arrl.net

THE NAME OF THE GAME

Jim Shepherd, W6US nvjims@gmail.com

SNARS LINKED REPEATER SYSTEM

We have a large repeater system that covers most of the western Nevada area. How it works is still a mystery to most of its users.

There are 5 VHF and currently 1 UHF repeater in the system to allow access. The UHF 444.875 is located on **Lobdell Peak** (also known as Pine Grove) southeast of Wellington, NV. Its coverage area ranges from Bridgeport to Yerington and it can be used from other high spots around the area with higher power radios. Connected to the repeater is a controller which handles signal levels, the Morse ID system, and the connection to another UHF radio which is a link connected to a directional antenna that is pointed at Mt. Rose.

The **Mt. Rose** system is actually located on **Relay Peak** about 2 miles SSW of Mt. Rose, is the next in line. The Rose repeater sees a lot of country including some amount of the Central Valley in California, Fallon, North Valleys, and the Carson Valley. A lot of Reno and Sparks is shielded from this repeater due to the actual Mt. Rose blocking the signal path. Incline also has poor reception due to the topography even though it is quite near to the repeater.

The repeater on Rose is on 147.150 VHF and it is connected to a controller which, in turn, is connected to two UHF link radios. One of these is connected to a Yagi pointed at Lobdell and the other is pointed at Peavine. The controller can be set to make Rose a 'stand alone' repeater which is done for some special events while still passing signals from the remainder of the system to the other repeaters. The controller can also disconnect the links. We have done that with the link to Lobdell recently when that system was not working properly...

Peavine is the next repeater up the line, and it also has 2 link radios as well as the VHF repeater on 147.210. It is scheduled to get a second UHF repeater on 444.125 in the near future to allow those with UHF DMR radios to use them in analog mode to access the linked system. Again, the controller will allow making either of these two stand alone, or shutting them off or shutting down the links. The two link radios go to Rose and Virginia Peak.

Peavine covers most of the Reno/Sparks area very well. Some areas on the extreme southwest like Montreux are shadowed, and it does not really cover much south of there. The bulk of the Reno/Sparks area is also covered by the 146.390 and the 147.300 which are stand alone repeaters and a good place to take your conversation if both of the stations are in the coverage areas of those stand alones. This also holds true for special events that are entirely contained in the coverage area. There is no sense in tying up the big system for something that can be done on a stand alone repeater.

Virginia Peak covers most of the Reno/Sparks area as well as Fernley, Fallon, most of Hwy 445, Pyramid Lake, and with better antennas and mobile radios, those in Susanville and Gerlach can get into it. The VHF repeater on 146.030 got a new antenna recently after ice and high winds destroyed the old one over the winter. Like most of the others, it has 2 UHF link radios, one pointed at Peavine and one at Toulon.

Toulon Peak is located west of Lovelock in the Trinity Range. It covers I-80 from just east of Fernley to the Humboldt area just west of Imlay. Additional coverage is into the Fallon area and some parts of the Black Rock Playa as well as a lot of the western Pershing County backcountry. The VHF repeater is on 146.925 which is attached to the site combiner system to a common antenna with other services. The link system is actually a repeater which allows potential attachment of other backcountry repeaters or portable systems as this site 'sees' some mountaintops in western Humboldt County, an area that is a black hole for repeater coverage. This link repeater has directional antennas pointed at Virginia Peak and Winnemucca Mountain.

The **Winnemucca** VHF repeater is on 146.670 and covers a huge amount of country in eastern Humboldt and Pershing counties as well as some mountain tops in southern Oregon and Idaho. It also covers I-80 from Humboldt to Golconda Summit. The UHF link radio attaches it to our system at Toulon.

When you key up your radio on the system, there are 16 links and repeaters that also have to get to work... The controllers have to take some time to decide if the signal has the right CTCSS so it can fire off the connected transmitters. Think of it as a line of dominos standing on end, and if you tip one over it goes right down the line tipping over the rest. That takes time before it gets to the other end of the line. 'Quick keying' like you do on Simplex or HF will cut off the first word or two, and if you quickly said "Go Ahead WZ7ABC", at the other end of the links all that may be heard is "C". Relax, key the mic, take a deep breath and then talk.

Quick Keying also leads to some repeater time outs as the repeaters further down the line will not have had the opportunity to drop. When someone stops transmitting, you will hear a 'courtesy tone' and then a click as the repeater you are listening to turns off. That is when you need to wait a second or two before transmitting so you do not time out the system. Also, if you are using a handheld, you should be on high power with your average deviation set at 3 KHz… Your voice should be as loud or louder than the repeater courtesy tones or IDer. Most new foreign made radios come with narrowband set as the default, and that is a major cause of low audio.

It is a good system and there are some upgrades in the works. There is the potential of once again linking with the Elko Club's system in Winnemucca. There is also the potential to provide more coverage in the northwestern area of the state to provide communications to some country that does not have even cell service which will be helpful to those who travel and recreate up there.

Enjoy the system and be sure to move to the stand alone repeaters if you don't need to go over the mountains. Also remember that these are on mountaintops with very good antennas and 50-100 watts of power. With a handheld you may be able to hear the repeater but it may not hear you. You can see a coverage map for the system at **http://snars.org/repeaters/analog/**

MIKE'S MISSIVES CHAPTER SIXTY FOUR

Mike Katz, N7MSK

§97.313 Transmitter power standards. **(continued from last month)**

(f) No station may transmit with a transmitter power exceeding 50 W PEP on the UHF 70 cm band from an area specified in paragraph (a) of footnote US270 in §2.106, unless expressly authorized by the FCC after mutual agreement, on a case-by-case basis, between the Regional Director of the applicable field facility and the military area frequency coordinator at the applicable military base. An Earth station or telecommand station, however, may transmit on the 435-438 MHz segment with a maximum of 611 W effective radiated power (1 kW equivalent isotropically radiated power) without the authorization otherwise required. The transmitting antenna elevation angle between the lower half-power (3 dB relative to the peak or antenna bore sight) point and the horizon must always be greater than 10°.

(g) No station may transmit with a transmitter power exceeding 50 W PEP on the 33 cm band from within 241 km of the boundaries of the White Sands Missile Range. Its boundaries are those portions of Texas and New Mexico bounded on the south by latitude 31°41? North, on the east by longitude 104°11? West, on the north by latitude 34°30? North, and on the west by longitude 107°30? West.

(h) No station may transmit with a transmitter power exceeding 50 W PEP on the 219-220 MHz segment of the 1.25 m band.

(i) No station may transmit with an effective radiated power (ERP) exceeding 100 W PEP on the 60 m band. For the purpose of computing ERP, the transmitter PEP will be multiplied by the antenna gain relative to a half-wave dipole antenna. A half-wave dipole antenna will be presumed to have a gain of 1 (0 dBd). Licensees using other antennas must maintain in their station records either the antenna manufacturer's data on the antenna gain or calculations of the antenna gain.

(j) No station may transmit with a transmitter output exceeding 10 W PEP when the station is transmitting a SS emission type.

(k) No station may transmit in the 135.7-137.8 kHz (2200 m) band with a transmitter power exceeding 1.5 kW PEP or a radiated power exceeding 1 W EIRP.

(l) No station may transmit in the 472-479 kHz (630 m) band with a transmitter power exceeding 500 W PEP or a radiated power exceeding 5 W EIRP, except that in Alaska, stations located within 800 kilometers of the Russian Federation may not transmit with a radiated power exceeding 1 W EIRP.

(m) No station may transmit with a peak equivalent isotropically radiated power (EIRP) exceeding 316 W in the 76-81 GHz (4 mm) band.

SHORT TAKES **(By Jim Shepherd W6US)**

CONTEST CALENDAR

The ARRL SSB DX contest is this weekend starting at 1600 on Friday and running until 1600 on Sunday. This is a great opportunity to pick up some DX stations as they can only work the US, and we can only work them. The exchange is just our 2 letter state abbreviation and a signal report, usually 59. If you are calling CQ and running, end you CQ with your callsign every time. Idaho, Oklahoma and Wisconsin QSO Parties are the second weekend in March. The following weekend is the BAETG RTTY contest for those who use this 2 tone digital mode, and the Virginia QSO for others. The last weekend of the month is the CQ World Wide WPX SSB contest where you can work anyone while trying to get lots of callsign prefixes as multipliers. These and other contests information can be found at **https://www.contestcalendar.com/contestcal.html**

DX

There are some operations starting to pick up. Sri Lanka, Madeira, Uganda, and Maldives are some of the featured DX operations this month. The ARRL SSB DX and the CQ SSB WPX contests are good places to also look for DX those weekends. More information can be found at **https://www.ng3k.com/Misc/adxo.html**

Third Monday ZOOM Ham Radio Night

We will have our popular Ham Radio Nights via ZOOM to get your questions answered. It will be held at 7pm on Monday, March 21. More information, including the link will be published before that date.

NAME THAT RIG?

(Answer on page 11)

THE COMSTOCK MEMORIAL STATION, INC.
A NEVADA 501C3 NOT FOR PROFIT CLUB
W7RN K7RC

A UNIQUE INVITATION FOR SNARS MEMBERS

Regardless of your license grade, there is a unique gamut of challenges and experiences in the world of HF Radio. The spectrum from 1.8 to 30 MHz will open a new world to you that is affordable and practical for most Hams. This series of hands-on interactive workshops is offered to those who have not yet experienced HF and for those who areinterested in learning the possibilities available on HF.

INTRODUCTION TO HF WORKSHOP
An overview of radios, antennas, propagation modes and on-the-air activities. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station (*AKA* CMS) in Virginia City Highlands. (Closed. Held Feb 19.)

INTRODUCTION TO HF ANTENNAS WORKSHOP
All about antenna design, fabrication, and installation from a wire in the trees to Yagis and beyond. Concentrations on topics requested by attendees. Opportunities to "get on the air" From the Comstock Memorial Station. (Open for registration, see link below.)

INTRODUCTION TO HF EQUIPMENT WORKSHOP
An overview of radios, antennas, propagation modes and on-the-air activities. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station. (Not yet open for registration.)

INTRODUCTION TO DX, CONTESTING AND OTHER FUN ACTIVITIES
An overview of many of the activities available on-the air on HF. Concentrations on topics requested by attendees. Opportunities to "get on the air" from the Comstock Memorial Station in Virginia City Highlands. (Not yet open for registration.)

Each Workshop is limited to 8 people. Face masks are required. Please wear Your SARS nametag. There is no particular time limit for each workshop.

THE CHARTER OF THE CMS is to advance the art of Radiosport, to train new operators and provide a venue for highly motivated hams to advance their operating skills. Since the Pandemic, most on-site activities are limited. W7RN maintains three remote hosts to allow challenged hams to access the station from the Internet. www.w7rn.com

See https://snars.org/intro-to-hf/ for more info, signup sheets

YOUTH INVOLVEMENT

Getting started in ham radio with the youth is the process of opening up young eyes to possibilities of:

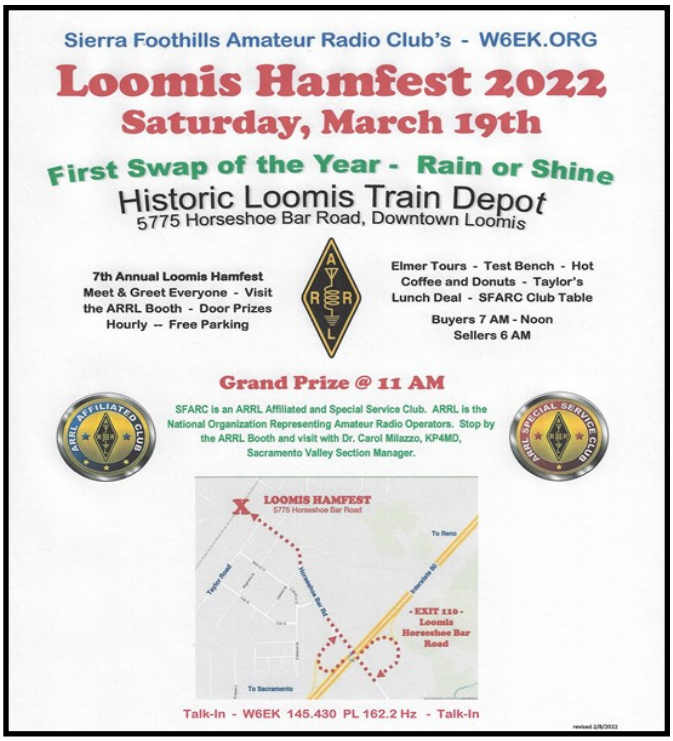
- Expanding their world
- Exploring amateur radio
- Putting them on the radio to work
- Go beyond the Menu: Create technology for them to experience

Here's "22 Things you can do with Amateur radio" which is so engaging, especially for the youth which is the future for the ham radio hobby.

More Info:
https://www.arrl.org/shop/files/pdfs/Youth%20Flyer.pdf

The adventure is awaiting. Anyone—of any age—can be on-the-air as an Amateur Radio operator! If you are open to engaging more with youth, feel free to contact me for help:
73,
Barry K6ST k6st@arrl.net
Nevada Section Youth Coordinator
ARRL (American Radio Relay League) www.arrl.org

HAMFESTS!



THE MOST IMPORTANT HAMFEST….

Thanks to Tony Marcin W7XM and Jim Shepherd W6US for info on hamfests!

SOME NEW RULES GOING INTO EFFECT THIS YEAR FOR ARRL FIELD DAY

After taking a few detours over the past couple of years due to the COVID-19 pandemic, ARRL Field Day rules are being updated on a permanent basis starting this summer. ARRL conducted a Field Day community survey with invitations propagated far and wide, and direct emails sent to more than 15,000 individuals and ARRL-affiliated clubs. After sorting through, reviewing, and discussing the survey results, the ARRL Programs and Services Committee recommended a number of rule changes for ARRL Field Day, which will take place this year over the June 25 - 26 weekend.

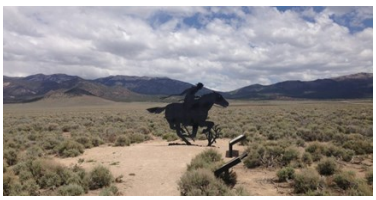
Starting this year, the maximum PEP output for a transmitter used by anyone submitting a Field Day log will be 100 W. The power multiplier of 2 will remain in place, and the high-power category will be removed from the rules. Until this year, the maximum low-power limit had been 150 W for most ARRL-sponsored operating events. The power multiplier will remain at 5 for QRP participants running a maximum of 5 W or less. As previously announced, 100 W is now the low-power category limit for all ARRL and IARU HF Contests, effective January 1, 2022.

A couple of changes instituted initially as accommodations for the COVID-19 pandemic will remain. Class D (Home) stations will continue to be able to earn points for contacts with other Class D stations. The club aggregate scoring change initiated in 2020 as a temporary measure will become part of the permanent rules. In the aggregate scoring plan, the scores of individual stations are combined under the score of a single club.

Another change, involving Rule 7.3.2 Media Publicity, has been modified. Rules to date have offered 100 bonus points for attempting to obtain publicity and demonstrating same. With the ease of posting via Facebook, Twitter, Instagram, and various other media websites, Field Day participants will now be required to obtain publicity, not just try to do so. Any combination of bona fide media hits would qualify for the bonus points. For example, posting the details of your upcoming or ongoing Field Day activity, or your Field Day results, on a club or news media site, on Facebook, or via Twitter and Instagram would meet the bonus criteria. Photos and videos are encouraged as part of media posts. **From: ARRL Letter Feb 10 2022**

2022 PONY EXPRESS RE-RIDE

NATIONAL PONY EXPRESS ASSOCIATION



June 6 Departs St. Joseph, Missouri
June 16 Arrives Sacramento, CA

Nevada

June 13 Arrives in Nevada at Ibapah
June 15 Departs Nevada at Stateline
The pony will leave Nevada and enter California at South Lake Tahoe, CA.

Need of Ham Radio Operators

-To follow pony on the trail to report position, emergency communications, or other "duties" as assigned. Road conditions vary with location of the trail….highway, dirt roads, rough roads (4x4).

-Relay operators to relay information from Ham operators on the trail….can be on a favorable mountain location, valley location, or from your shack. UHF/VHF 5w handi-talkies are not encouraged for vehicle usage....50W mobile radios are the standard.

-All of these needs are assigned as "shifts", we operate 24/7 while the pony is in Nevada.

-All ham operators who helped out last year will have priority to their assigned position last year or change of assignment.

This is an initial post and I will have more information as we get closer to June…..for now please see: **http://nationalponyexpress.org/the-states/nevada/#2022-nevada-reride-schedule**

Questions, comments? Please contact me at **KJ7GEZ@gmail.com**

FUN STUFF FOR MARCH

March has just two ARRL or NCJ contests, shown in BOLD. There are also four state QSO parties. Many states show up in OUR QSO party, so we should do likewise! Have fun!

2 Mar 2300 to 6 Mar 2300 3.5-14 AWA Rollins Memorial DX Contest CW **www.antiquewireless.org**

5 Mar 0000 to 6 Mar 2359 1.8-28 ARRL International DX Contest, SSB Ph www.arrl.org/arrl-dx

5 Mar 0000 to 13 Mar 2359 Novice bands Novice Rig Roundup CW **www.novicerigroundup.org**

12 Mar 1500 to 13 Mar 1500 1.8 Stew Perry Topband Challenge CW **www.kkn.net/stew 12 1500**

13 Mar 2100 to 13 Mar 2100 3.5-50 Oklahoma QSO Party CW Ph **www.k5cm.com/okqp.htm**

12 Mar 1900 to 13 Mar 1900 1.8-28 Idaho QSO Party CW Ph **www.pocatelloarc.org/idahoqsoparty**

12 Mar 2300 to 13 Mar 0300 3.5-14 North American Sprint, RTTY Dig www.ncjweb.com

13 Mar 1800 to 14 Mar 0100 All Wisconsin QSO Party **www.warac.org/wqp**

19 Mar 1400 to 20 Mar 2359 All Virginia QSO Party CW Ph Dig **www.qsl.net/sterling/VA_QSO_Party**

26 Mar 0000 to 27 Mar 2359 1.8-28 CQ WW WPX Contest, SSB Ph **www.cqwpx.com/rules.htm**

Check out the rest here:
http://www.arrl.org/files/file/Contest%20Corral/2022/March%202022%20Corral.pdf

If you're not into contests, there's always DX to chase! March looks a little sparse in real good stuff, but with the ARRL DX Mar 5-6, and CQWW contest Mar 26-27, be sure and check the days before and after those for other good DX!

Mar 01	Mar 31	**Austral Is**	**FO**
Mar 04	Mar 18	**Maldives**	**8Q7CQ**
Ma r07	Mar 14	**Uganda**	**5X1XA**
Mar 09	Mar 18	**Gambia**	**C56DF**

Check https://www.ng3k.com/Misc/adxo.html for updates on DXpeditions to make sure they're still a go and see other listings!

RENO QRP SLOW SPEED CW NET

NEXT NET SESSIONS (three of them) WILL BE March 3 , March 17 and 31 at 11 AM Pacific. Check with **WD7Y@sbcglobal.net** to confirm times. Target frequency 7.045 MHz, if busy search somewhere near that frequency.

THE FOLLOWING SHOULD ALWAYS BE IN YOUR REPORT:

NAME ,RST, LOCATION, RIG, POWER, ANTENNA.
REMEMBER TO INCLUDE RST IN YOUR REPORT
Feel free to add something else in your exchange.
Take some time to report RST for other OP's or anything else that comes to mind.
Sharing information about you and your equipment will accomplish two things.

First It gives you and everybody else practice sending and copying.
Second It is nice to spend time on the air with your friends. Consider this a QRP meeting on the air.

Relax and have some airtime fun with your friends.
73/72 Ed/WD7Y

NAME THAT RIG **(from page 6)**

After World War 2, radio manufacturers were scrambling to switch to peacetime construction. The **Hallicrafters Company** was no exception. In 1947, they released what is often called their flagship of the early post-war era, the **SX-42 receiver**. This high-end monster weighed in at 52 pounds, had 15 tubes, and covered from the BC band to 110Mhz in six bands. There were also six calibrated Amateur bandspreads, 80, 40, 20, 10, and 6 meters (there was no Amateur 15M band in 1947). It was an Amateur's dream. There were six positions of selectivity, plus a crystal phasing filter, which could produce razor-sharp tuning not far off from today's receivers. Additionally, it received CW (and SSB), AM, and both narrow and wide-band FM. Thus it appealed to discriminating listeners both in the Amateur and the SWL/HI-FI camps. While it was only single conversion superhet, some unique circuit sections were carried through for years to come, influencing top-end **Hallicrafters** receivers almost to the end of the company. Three knobs-a smaller one with a concentric larger one, plus a center T-bar knob controlled the tuning: The larger knob tuned the main tuning, the center T-bar switched between main and bandspread tuning, and the smaller one did the bandspread. Lots of controls—knobs to twiddle, switches to toggle, meant unusual utility. The audio section used a push-pull twin tube amp for high fidelity sound. The **SX-42** was built through 1950, and a fair number still exist today, commanding premium prices.

The matching speaker, model R-42. It contains an 8 inch speaker and uses the bass-reflex principle for high fidelity reproduction. It also has a "communication/high fidelity" network with switch and measures 17" wide, 11.75" tall, 12.50' deep. It, too, is $$$$

URGENT NEED FOR COMMENTS

The United States Department of Agriculture, Forest Service is planning on assessing new fees on communication sites. These fees are based upon the costs associated with administration of the communications workload of the Reality Specialists, a program known as "cost recovery". These actions were authorized by the 2018 Farm Act.

They proposed an annual fee of $1400 per 'Communications Use Authorization". This is in addition to the statutory leasing charges that are currently paid by users. Our current lease payment is about $140 per site.

They did do a small study of the ability to pay of the users, and most, being commercial entities like cellular companies, showed a minimal effect. However, amateur radio is a non-commercial activity, and in fact, we are statutorily prohibited from receiving pay for our communication services.

Amateur Radio provides free public communication services for public agencies around the country. In times of disasters, amateur radio operators can be deployed to areas where other services have failed. They can augment existing services, and this is recognized by FEMA under ESF2.

As Amateur Radio is a non-commercial activity, they should not be subject to charges like this cost recovery assessment. $1400 to a commercial cellular company is a minor expense, while to a small group of amateur operators with a communications system on a Forest mountaintop it may cause them to remove their use. This is especially true in the sparsely populated areas in and around the western forests, areas that are traditionally underserved with communications. There are a lot of areas that are served by amateur radio that have no cellular coverage, and this could affect public safety.

The comment period has been extended due to a whole lot more comments than expected, especially from ham operators and small users like volunteer fire departments, rural law enforcement and even other cooperators with the Forest Service. If you have not already replied, please do and your comments are due by **March 31, 2022**. The full text of the proposed regulation can be found at **https://www.govinfo.gov/content/pkg/FR-2021-12-22/xml/FR-2021-12-22.xml#seqnum72540**

Comments are accepted by either direct entry on the eplanning website, Federal eRulemaking Portal: **http://www.regulations.gov**. Follow the instructions for sending comments.

They can also be mailed to Director, Lands & Realty Management Staff, 201 14th Street SW, Washington, DC 20250 -1124.

In either case, you will need to specify **RIN 0596-AD44** so they will know which proposal you are addressing.

You should address key points like our non-commercial nature, our support of public service, our contributions to public safety in remote areas, and our general service to disaster communications. Ask for exemption from this new fee.

You will notice that we are not developing a 'sample' letter, but we are requesting that you write your own comments. Form letters, even in large quantities, are counted as one response… To use the eplanning website, it is best to write your comments in Word or a similar word processer, and then copy your comments to the proper place on the eplanning site. Be sure to check for correct spelling and grammar as these items add to the validity of your comments. A common mistake is calling the agency "Forestry Service" or "Forrest Service" when it is formally call "United States Department of Agriculture, Forest Service" or "USDA, Forest Service" but just "Forest Service" is fine.

Key items to mention are our Public Service uses, such as SKYWARN, Hurricane response, aid to agencies such as Red Cross, involvement in search and rescue, and help with community events such as bike races, parades and fun runs. Hams have directly aided the Forest Service with communications during wildfire events. As we are all volunteers, stress the financial hardship a $1400 fee could cause. This may lead to the removal of repeater systems, especially in rural areas where the coverage is dearly needed due to the lack of cell coverage.

We need lots of comments to be sent to have any chance of getting an exemption from this fee. Please send yours today if you haven't already done so!

SNARS BOARD OF DIRECTORS

W7SSB's FUN STUFF

THE ORIGINS OF MILITARY RADIOS

Drums, flags, horns, pigeons and horseback riders: these are just some of the ancient methods of sending messages over long distances before the days of voice comms over radio and telephone.

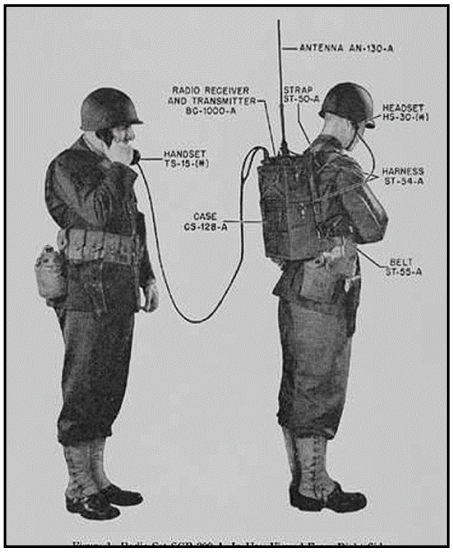
Homing pigeons have long played an important role in war. Due to their homing ability, speed and altitude, they were often used as military messengers. Carrier pigeons of the Racing Homer breed were used to carry messages in World War I and World War II, and 32 such pigeons were presented with the Dickin Medal.

The advent of radio in the mid-20th century ushered in a new era of warfare. Suddenly the most hostile and remote conditions in land, sea, and air could be conquered at distances once believed impossible.

Here's a quick look at how military radio equipment has evolved from **WORLD WAR I** to today.

Military radio equipment was still in its infancy during the first World War. For instance, an aircraft with an equipped radio had a range of only 2,000 yards, and field radios were extremely cumbersome and fragile. Animals were the unsung radio heroes of World War 1, as radio equipment had to be carried by horses and mules to reach their broadcast areas.

WORLD WAR 2



The Motorola SCR-300 in 1940 was the original "manpack" radio. Used primarily by the Army Signal Corps, about 50,000 total units were produced over the course of the war. Although it wasn't handheld, it was actually the first radio to be called a "walkie-talkie."

The SCR-300, with its 18-tube FM receiver, saw heavy use in Normandy and the Italian campaigns, as well as in the Pacific Theater. With the ability to communicate in real-time, it revolutionized battlefield combat.

The biggest complaint? It was difficult to supply enough batteries to keep the radios operational–about 200 batteries were required to maintain just one unit. On top of that, the backpack-mounted radio weighed a whopping 38.23 lbs when fully equipped.

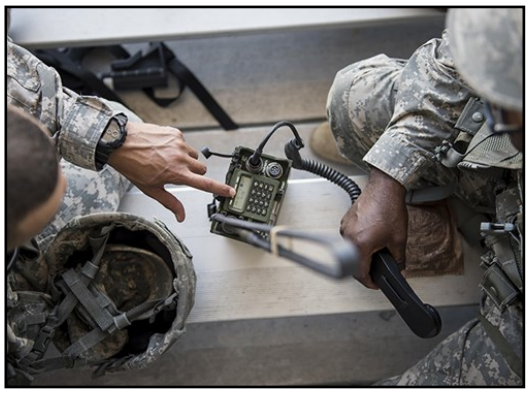
VIETNAM ERA RADIO

The AN/PRC 77 is a portable VHF FM radio transceiver that entered service in 1968 during the Vietnam War and is still in worldwide use today for training.

The "AN/PRC" name designation stands for "Army/Navy, Portable, Radio Communication."

This "manpack" transceiver was a major upgrade from its predecessors for two reasons. First, the PRC 77 had the ability to be used with voice encryption systems. Secondly, it used solid-state components for amplification instead of glass vacuum tubes which enhanced the radio's ruggedness and power efficiency.

MILITARY COMMS TODAY



America and our allies use SINCGARS (Single Channel Ground and Airborne Radio System). Today's radio systems have the ability to hop frequencies, while also having the ability to accept encrypted digital data from satellite and computer systems. Latest models include GPS capabilities, internet controllers, and advanced security features.

From radio's early days as a means to send telegraph messages, to the robust digital comms systems of today, it's amazing how far radio technology has advanced.

This is just a fraction the communications equipment that the military has used through the years! With new technology the costs also rise. Currently the Harris PRC 160V is the flavor of today's military!

Your taxpayer dollars at work . Recent order for more than 9,000 PRC 160V radios @ $60k + apiece. Several years ago the military bought the PRC 158 @ $200k apiece for an army contract for new radios of $12.7 billion. Hams cannot buy and use these radios. The special features in the radios we can't use, and it's not FCC certified.

Till next time stay tuned! Don W7SSB

ARES NEWS

EVENTS CALENDAR

EVENT 2022	DATE	DATE END	SPONSOR/ORGANIZER	COORDINATOR	CONTACT
Silver State 50/50 race	5/21/22		Silver State Striders	Steve KS6A	ks6a@sbcglobal.net
Stetina Paydirt	5/21/22		John Prouty; Bike Monkey	Bob Miller WA6MTY	wa6mty@gbis.com
Truckee Dirt Fondo Bike Ride	6/11/22		John Prouty; Bike Monkey	Bob Miller WA6MTY	wa6mty@gbis.com
Indian Valley Century Bicycle Ride	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
America's Most Beautiful Bike Ride	6/5/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Pony Express Re-Ride	6/6/2022	6/16/22	SIERA	Jeff Cauhape K7BCV	j_cauhape@yahoo.com
Alta Alpina Challenge	6/25/22		Alta Alpina Cycling Club	Jennie Hamiter, KE7YBA	jenniehamiter@mac.com
Running With the Bears	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Bear Growl Gravel Grinder	TBD		Plumas ARC	KJ6CUG	dltrotter@sbcglobal.net
Lost and Found Gravel Grinder SBTS	6/22/22		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Death Ride	7/16/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Tahoe Rim Trail	7/15/22	7/17/22	Tahoe Mountain Milers	Bob Miller WA6MTY	wa6mty@gbis.com
Trailblazer Challenge (two events)	TBD		Make-A-Wish Foundation	Bob Miller WA6MTY	wa6mty@gbis.com
Vegas to Reno Off Road Race	9/10/22	9/12/22	Best in the Desert Racing Assn	Keith KC7HTK	kc7htkeith@hotmail.com
Tour De Tahoe	9/11/22		Tahoe Amateur Radio Assn	Paul Gulbro, WA6EWV	wa6ewv@juno.com
Reno Air-Races	9/14/22	9/18/22	WC-ARES	Bob Miller WA6MTY	wa6mty@gbis.com
Grinduro SBTS	TBD		Plumas ARC	Larry Trotter KI6YUK	dltrotter@sbcglobal.net
Nevada Day Parade	10/29/22		NV AREA NW DEC	John Abrott KD7NHC	jabrott77@gmail.com, cell 775 790-1739.
Sparks Turkey Trot	11/24/22		WC-ARES	Bob Miller WA6MTY	wa6mty@gbis.com

The next frontier of Gravel Racing:
The Pine Nut Mountains.
May 21, 2022 Carson City

EVENT DESCRIPTION:
Professional Cyclist Peter Stetina discovered his love of gravel and spirit of exploration in this range. It took a lot of dead ends and calls for help, but we finally hit Paydirt. Together with Carson City, we invite you for the expedition of a lifetime.

The perfect blend of competition and camaraderie; the Paydirt is equal parts race and celebration. With Bike Monkey's **Road Rally format**; racing takes place on designated segments. It's the perfect mix of full-gas racing while allowing you time to socialize, regroup, and enjoy the bounty of our aid stations.

This is a mixed terrain pavement/gravel/sand event. The course is best suited for a gravel bike. A hardtail mountain bike will do if you have fast tires. We recommend having tubeless, 38c or larger tires with some tread.

Come help us provide communications between the Check Points, SAGs, Sweeps ("Tail End Charlies" to make sure everyone gets to the next Check Point safely) and the Ride Directors. There are four Check Points plus the Start/Finish.

Support And Gear (SAGs): We'd like a mix of trail bikes and 4x4 to patrol Brunswick Road and Sunrise Pass Road. Conventional vehicles can cover the sections from Johnson Lane through Genoa up to the Clear Creek Trailhead. We need between 15 and 20 SAGs/trail bikes.
There will be a festival at the end of the event at Fuji Park, all volunteers are invited if they put in a minimum of 4 hours of volunteer time. More details to follow.

Contact me if you like to help out. Even brand new Hams. Here is your opportunity to learn how to operate portable, have a lot of fun and eat.

Send me your name, call, contact phone and email and where you want to help.

Bob Miller WA6MTY **wa6mty@gbis.com**
Emergency Coordinator for Washoe County
Amateur Radio Emergency Service
775 843-5952
www.wcares.us

EIGHT TOWERS WITH THIRTY-THREE ANTENNAS. . .OH MY!

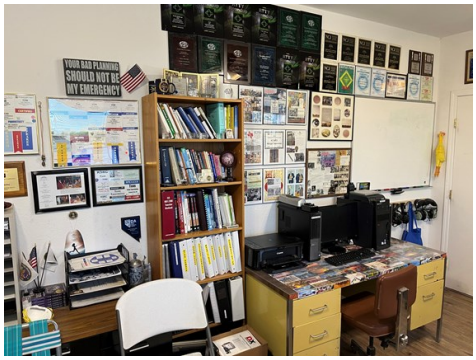
Saturday morning, February 19th, found six SNARS members: Chuck KK7BKS, Tom WA9ETO, Greg N7SAX, Clifford KJ7TDD, Jack K7AJR and Tom KJ7TKR, at Comstock Memorial Station, W7RN, in Virginia City Highlands for an HF workshop hosted by Elmer, Tom Taormina K5RC.

His experience, you ask. How about having 364 countries under his belt having thrown away six hundred pounds – you read that right – of QSL cards. He still has a bunch of treasured QSL cards including the gold lamé card of King Hussein, the former Shah of Iran, who came close to personally visiting Tom's station three times. As a former NASA engineer with over sixty-four years of Ham experience including his 35wpm CW certification, "Professor T" walked us through the intricacies and issues of working HF at his station: a 4+ year legal battle with Storey County over his antenna farm (he won!); a Terrain Analysis Study to precisely determine the correct positioning of his antenna array; 100 bead ferrite Baluns to eliminate RF drifting back into his station; DX mapping on Google; connectors, coax, radios.

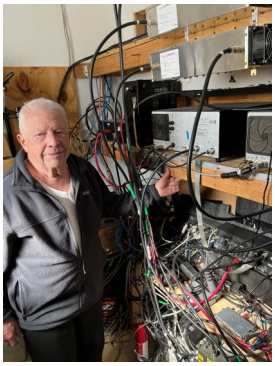
The Elmering grew endlessly, both fast and furious. Professor T claims no rights to being PC: "DMR is basically a cellphone, not radio." And the personal best take-home pearl for this newbie, "Never try to log into a Pig Farmer's Net!" Priceless. A modest man of few, but choice, words, Tom Taormina is an EFC (Elmer First Class) and an icon in radio. If you missed it, you missed a lot.

73!
Tom Resk, KJ7TKR

All photos this page courtesy of Tom Resk KJ7TKR



One small part of W7RN



Only Tom could make sense of this

Another part of W7RN

One of the 33 anten-

Yet another shot of W7RN

More towers

Helen, W1YL, who uses W7RN remote from her home in Florida. If you work CW, you've probably worked Helen, she's quite a CW operator!

COMMENTS FROM THE CLASS AT W7RN

From Tom, K5RC:
Thanks for your participation in the workshop last Saturday. I had a great time and appreciated the energy you all brought to the session.

It was such a success, that SNARS is having to deal with having first session members wanting sign up for future sessions and not leaving room for other club members. I will take the responsibility of addressing that individually:

Greg, N7SAX – Your enthusiasm is admirable. You already have a station set up and working antennas. What you need is a hands-on Elmer who can come to your station and give you one-on-one help. Perhaps you can invite one of the other workshop members to join you for learning sessions and find another SNARS member to be your Elmer. You can also look at signing up for the next round of workshops which will likely start in June. BTW- I admire your audio setup. I had to give up high end audio when we moved from Texas.

Tom, WA9ETO – Howdy, neighbor. Thanks for your participation and enthusiasm. I welcome your offer of help with antenna work and station maintenance. You are welcome to join our team of workers and operators. There may be a way of enhancing your remote operation with our remote hosts. Also, we might form a local group with you, me, Brad, Mark and other Highlanders.

Chuck, KK7BKS – If I remember correctly, he is starting from scratch and needs help.

Clifford, KJ7TDD – He just needs help installing his radio and antennas on his truck.

Tom, KJ7TKR – Thanks for your participation, neighbor. I welcome your offer to help with the station and we welcome you to individual tutoring with operating at W7RN. Let's get together and explore your needs and ambitions.

Jack, K7AJR – We need to talk some more one-on-one to better help you forge ahead with HF radio.

BTW – My back surgery was aborted because of high blood sugar. We will have to start that clock over again in the days to come. I also spent this Saturday in the ER with a bladder infection.

73,
Tom Taormina, K5RC
775-847-7929

From Tom WA9ETO:
It was gracious of Tom to invite us to see "boundary condition" stations and antennas. The stacked beams on rotating towers are amazing. The 80 m beam looks way smaller than it really is. It helps us understand what it takes to win in a pile up.

73s Tom Brinkoetter WA9ETO

From Greg Ford, N7SAX:
I attended the first of Tom's sessions with interest in picking up as many nuggets of knowledge of HF that Tom might lay down, with specific interest in the possibility of learning more about antennas. I knew that the first session was not about antennas but through Tom's grace and active interest in imparting knowledge and understanding, a few questions were asked and some fundamentals were discussed. I'm looking forward to attending the antenna session to broaden my understanding of the physics of various antenna types, wave propagation and the ionosphere.

73, Greg Ford N7SAX

HAM RADIO NIGHT

3rd Monday of each month at 7PM PT on Zoom
Join together and Elmer each other for Ham Radio Night on
MONDAY, MARCH 21, 2022, 7PM

The topic smaller breakout groups will be: POTA/SOTA, ANALOG VHF/UHF, DMR/FUSION, ANTENNAS

Each participant can move themselves around to different breakout topics in zoom conferencing to enjoy.

If you have any questions or would like to be of service as an Elmer, please contact K6ST Barry k6st@arrl.net

Register below for our next Ham Radio Tech Night, SNARS (virtual on Zoom conferencing) Mar 21, 2022, 7:00PM PST
https://us06web.zoom.us/meeting/register/tZYsd-mrrD4qHtHanPpfrVvW_ZufhzfJyoLn

Board of Directors Meeting Minutes

February 9, 2022 - 6:00PM

At Chin Chin plus Zoom

1. Call to order and roll call at 6:00 PM

Board of Directors:

Anthony Marcin, W7XM	P	Barry Bettman, K6ST	P	John Miller, N7JDM	P
Bill Jones, AE7OX	P	John Byerly, N7ROJ	P	Wes Vick, KG7QXE	P
Jim Shepherd, W6US	P	Doug Edmondo, W7DBE (Scribe)	P		

2. Approval of Minutes - Discussion/Action

The January 2022 meeting minutes were approved

3. Approval of Agenda - Discussion/Action

The Agenda was approved

4. Reports

A. President's Report – Nothing to report, see in person meeting update under old business

B. Secretary Report – 479 Members, nothing else to report

D. Treasurer – January 2022 End of Month, Operating: $9,841, Savings: $7,864, Self Insurance: $13,700, Paypal: $1,467, Convention: $4,313. Net Monthly ($10,155), net YTD: ($10,155). Memberships 22, Donations year to date $ (Amazon $0, Members $39, Paypal $8)

Notes:

1. Moved $10,000 from savings to Operating to pay for repeaters
2. Paid Sierra electronics $9,935.54 for 4 repeaters (1-12-2022)
3. Moved $1,500 from Paypal to Operating
4. Moved $220 from Operating to Self-Insurance
5. Moved $110 from Operating to Savings

D. Technical Team – Pat
Repeater Upgrade Control cables built for repeaters. Will be moving forward as soon as we have access. Have the adaptors for Davidson DSTAR / DMR fixes, Dave Metz donated repeater to be installed at the Gran Sierra.

E. Control Operators / Trustee
Nothing to report

F. Events

1. Field Day – No news, still early. Noted that plaques are being finished for the NV QSO winners
2. Ham Swap – Cofirmed we have the Cabellas lot on May 21st – currently working logistics for the event.

G. Education & Youth Activities

1. School Club Round up next week (2-14-2022), nothing from UNR, Barry will publish on the web site.
2. Got an Email from a teacher in Spring Creek, has a 30 minute home room. Possibly bringing a HAM radio into the school
3. Recording from February's meeting up on YouTube
4. March meeting – K1LB, Woody, Talk on SOTA and POTA. May have some interest from the Scouts.
5. April – Tentatively on amateur satellites, for May, tentatively Bob Hiel but may flip and have Bob talk in April.

H. Noon Net - Noon Net Manager – Going well, working to train a new NCO when he is available**.**

5. Old Business

A. Meeting Location Update – John Miller and Don Sherwood met with the Ramada on the 8th. The room with WiFi, AV, set up etc is $375 not including food (Food would be buffet style ~$16 per head). Board is discussing the frequency of in person meetings (Hybrid with zoom) and then zoom meetings for the months where we don't meet in person. Looking at April for potential first in person meeting. Barry was also looking at potential locations (Churches etc) for training or other meetings.

B. Forest Service Fees – Nothing new, noted that the grass roots effort is taking off. John B. noted that people are reaching out to all levels of Forest Service etc.

6. New Business

Tony is working setting us up with a donation clearing house as well as working on updating club management software – Looking at Microsoft Azure (They would give us a $3,500 credit each year) would be doing a home grown system. He will be looking to club mem bers for assistance.

7. Board member and Public Comments

During this time members and board of directors may speak on any topic regardless if the item was on the Agenda:

John B. - Nothing More
Wes V. - Nothing More
Bill J. - Nothing More
John M. - Nothing More
Jim S. - We really need to have a grant writer
Barry B. – DMR net still going
Tony M. - Nothing More
Doug (Public) – Nothing to add

8. Adjournment - Action

A. Next Meeting: March 9th, 2022. Location Chin Chin plus Zoom
B. Meeting Adjourned at 18:55